

U.S. Appln. Serial No. 09/609,913
Reply to Office Action Mailed November 2, 2007

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CURRENT LISTING OF THE CLAIMS

The listing of claims below replaces all prior versions, and listings, of claims:

1 1. (Cancelled)

1 2. (Currently Amended) A serving GPRS support node (SGSN) for use in a
2 mobile communications network having a plurality of cell sites, comprising:
3 ~~an interface adapted a connectionless, packet-based protocol layer to~~
4 communicate, over a Gb interface, packets with a connectionless, packet-based protocol
5 layer of with a base station system in a cell site over a Gb network; and
6 a controller adapted to transmit and receive data through the interface
7 ~~connectionless, packet-based protocol layer of the SGSN over the Gb network interface~~
8 with the base station system according to a connectionless, packet-based protocol;
9 ~~wherein the interface includes a connectionless, packet-based protocol~~
10 ~~layer to communicate packets with a connectionless, packet-based protocol layer in the~~
11 ~~base station system.~~

1 3. (Previously Presented) The SGSN of claim 2, wherein the
2 connectionless, packet-based protocol comprises an Internet Protocol.

1 4. – 7. (Cancelled)

1 8. (Currently Amended) The node base station system of claim 46, wherein
2 the ~~packet-switched~~ connectionless, packet-based protocol comprises an Internet
3 Protocol.

1 9. (Currently Amended) The node base station system of claim 46, wherein
2 the module is adapted to communicate data packets, each data packet containing
3 addresses identifying the node and the system controller.

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1 10. (Currently Amended) The ~~node~~ base station system of claim 9, wherein
2 each data packet contains Internet Protocol addresses.

1 11. - 18. (Cancelled)

1 19. (Currently Amended) A serving General Packet Radio Service (GPRS)
2 support node for use in a mobile communications system having base station systems,
3 comprising:
4 ~~an interface to one or more networks~~ an Internet Protocol (IP) layer to
5 communicate over IP-based Gb interfaces coupled to the base station systems, the IP
6 layer interface comprising a packet-switched element to manage communication over a
7 network the Gb interfaces between the serving GPRS support node and ~~at least one of the~~
8 base station systems,
9 wherein the IP layer is ~~packet-switched element comprises an Internet~~
10 ~~Protocol element~~ to communicate IP packets with IP layers ~~an Internet Protocol element~~
11 in the ~~at least one~~ base station systems ~~system~~.

1 20. (Currently Amended) The serving General Packet Radio Service support
2 node of claim 19, further comprising a User Datagram Protocol transport component to
3 manage connections over the ~~network~~ Gb interfaces.

1 21. (Previously Presented) The serving General Packet Radio Service support
2 node of claim 19, further comprising a network services layer to transport data units
3 containing signaling and bearer traffic over the network.

1 22. - 39. (Cancelled)

1 40. (Currently Amended) The SGSN of claim 2, wherein the connectionless,
2 packet-based protocol layer ~~of the interface~~ comprises a network layer, and the SGSN
3 ~~interface~~ further comprises a transport layer to manage connections over the Gb interface
4 network.

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1 41. (Previously Presented) The SGSN of claim 40, wherein the controller
2 comprises a network services layer to transport packets through the transport and network
3 layers.

1 42. (Currently Amended) A system for use in a mobile communications
2 network having a plurality of cell sites, comprising:
3 an Internet Protocol (IP) layer interface adapted to communicate with a
4 base station system in a cell site over a Gb interface; ~~network~~; and
5 a controller adapted to transmit and receive data through the interface IP
6 layer over the ~~network~~ Gb interface with the base station system according to a ~~packet-~~
7 ~~switched protocol~~,
8 wherein the ~~interface~~ comprises a network IP layer is to manage
9 communications of IP packets over the ~~network~~, Gb interface; and
10 a transport layer to manage connections over the ~~network~~ Gb interface,
11 wherein the controller comprises a network services layer to transport
12 packets through the transport and ~~network~~ IP layers,
13 ~~wherein the network layer comprises an Internet Protocol layer to~~
14 ~~communicate over a Gb network with an Internet Protocol layer of the base station~~
15 ~~system.~~

1 43. (Previously Presented) The system of claim 42, wherein the transport
2 layer comprises a User Datagram Protocol layer.

1 44. (Previously Presented) The system of claim 43, wherein the network
2 services layer comprises a General Packet Radio Service network services layer.

1 45. (Cancelled)

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1 46. (Currently Amended) A ~~node~~ base station system for use in a mobile
2 communications network having a system controller, the ~~node~~ base station system
3 comprising:
4 one or more radio transceivers adapted to communicate with mobile
5 stations; and
6 a module coupled to the one or more radio transceivers and adapted to
7 communicate through a Gb interface with the system controller according to a
8 ~~connectionless packet-based packet-switched~~ protocol;
9 ~~wherein the packet-switched protocol comprises a connectionless, packet-~~
10 ~~based protocol.~~

1 47. - 49. (Cancelled)

1 50. (Currently Amended) A ~~node~~ base station system for use in a mobile
2 communications network having a system controller, the ~~node~~ base station system
3 comprising:
4 one or more radio transceivers adapted to communicate with mobile
5 stations;
6 a module coupled to the one or more radio transceivers and adapted to
7 communicate with the system controller; and
8 an Internet Protocol layer to communicate over a Gb ~~network~~ interface
9 with the system controller according to an Internet Protocol.

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1 51. (Currently Amended) A method of communicating in a mobile
2 communications system having a base station system, a system controller, and ~~an~~ a Gb
3 interface between the base station system and the system controller, the method
4 comprising:
5 transmitting and receiving Internet Protocol (IP) data packets over the Gb
6 interface between the base station system and system controller ~~according to a packet-~~
7 ~~switched protocol,~~
8 wherein transmitting and receiving the IP data packets comprises an
9 ~~Internet Protocol IP~~ IP layer in the system controller transmitting and receiving Internet
10 ~~Protocol the IP~~ data packets over [[a]] the Gb network interface with an Internet Protocol
11 IP layer in the base station system.